

FPS SERIES

Rectifiers: 24V, 32V 48V: 1000 - 3000 Watts



1U Rack

Features

- Low profile, 1U height
- One, two or three 1 KW modules per 1U Rack
- Hot-swap capability
- Parallel operation with power share between modules
- Built-in redundancy diodes for **n+1 applications**
- High efficiency
- RoHS compliant
- Universal input and PFC
- Full array of signals
- LED front panel: AC OK, DC OK, DC Fail
- Optional IEC front panel AC input connector or rear connector (Positronic)
- CE Marked. EN60950 safety approvals
- Suitable for use as combined power supply and **Battery Charger** in high-end DC Back-up systems
- Alarm Signals
- **I²C Bus interface** option: add "S" to 1Kw module eg. FPS1000-24PS, FPS1000-24S
- To order rack with two or three floating output voltages per rack, consult.

SIZE - MODULE:	295 x 129 x 41mm (LWH) 320 x 129 x 41mm with handle
SIZE - RACK:	Rack Assembly: 482.5 x 384 x 43.6mm (LDH)
WEIGHT:	1KW module: 2 Kg. Rack: 3.5Kg

Specifications

INPUT VOLTAGE:	85 - 264 VAC, 120 - 380 VDC
INPUT FREQUENCY:	47 - 63Hz (440Hz with reduced PFC)
INRUSH CURRENT:	40A maximum
LEAKAGE CURRENT:	1.1mA at 230VAC
HOLD UP TIME:	20ms typically (800W load)
EFFICIENCY:	Model dependant 83 - 88%
HARMONICS:	EN61000-3-2 Class A
POWER FACTOR:	0.98 at full load
IMMUNITY:	EN61000-4 -2, -3, -4, -5, -6, -11
EMC:	EN55022 Level B, conducted & radiated
OUTPUT VOLTAGE:	24VDC (21.5 - 29) 32VDC (28.8 - 38.4) 48VDC (43 - 58)
AUXILIARY OUTPUT:	An isolated 12V output is provided at 0.25A with built-in Oring diodes
OUTPUT POWER:	1000W per module (3000W per rack)
LINE REGULATION:	±0.5%
LOAD REGULATION:	±0.8%
OUTPUT NOISE:	300mV (24V), 250mV (32V), 300mV (48V)
OVERVOLTAGE PROTECTION:	YES. Set at 130-140% of nominal V out. Recycle input after 30-60 sec to re-start
OVERLOAD PROTECTION:	Constant current, with auto-recovery, set at 105-125% of nominal rating
OVERTEMP. PROTECTION:	Output shuts down when temperature exceeds safe limits, with auto recovery
LOAD SHARING:	Single wire power share with up to eight units
REMOTE SENSE:	Compensates up to 1V on each output lead
I²C MONITORING:	Optional monitoring I ² C bus
ALARM SIGNALS:	DC OK, AC Fail, Over temperature. Open Collector Signals 5V/0V (OK / Fail)
REMOTE ON/OFF:	ON = 0 ~ 0.6V or Short OFF = 2 ~ 15V or open
OPERATING TEMP:	0°C to +50°C at 100% load. Derate at 2.5% per °C to +70°C
ISOLATION:	Input - output: 3000VAC Input - ground: 2000VAC Output - ground: 500VAC
COOLING:	Two internal fans (front to back) with variable speed
HUMIDITY:	10 - 90% RH non-condensing
SHOCK & VIBRATION:	ETS 300 019
SAFETY:	UL60950, EN60950
INPUT/OUTPUT CONNECTOR:	Positronic PCIB24W9M400A1. (FPS module) Mating #PCIB24W9F400A1

Instruction manual, application notes and further technical information is available from our website: www.amtex.com.au/ApplicationNotesPower.htm



AC/DC Single Output: 1000 - 3000 Watts

Model Rack Assembly	Details
FPS - S1U - P	Rack for 1 - 3 FPS1000 - P power supplies with front panel IEC socket input. Single DC Output bus.
FPS - S1U	Rack for 1 - 3 FPS1000 power supplies with rear panel IEC socket input. Single DC Output bus.
Stack Rack Case	Details
FPS - SST - P	Rack for 1 - 3 FPS1000 - P power supplies with front panel IEC socket input. Single DC Output bus.
FPS - SST	Rack for 1 - 3 FPS1000 power supplies with rear panel IEC socket input. Single DC Output bus.



FPS-S1U with rear IEC input sockets FPS-S1U-TB with Terminal Block

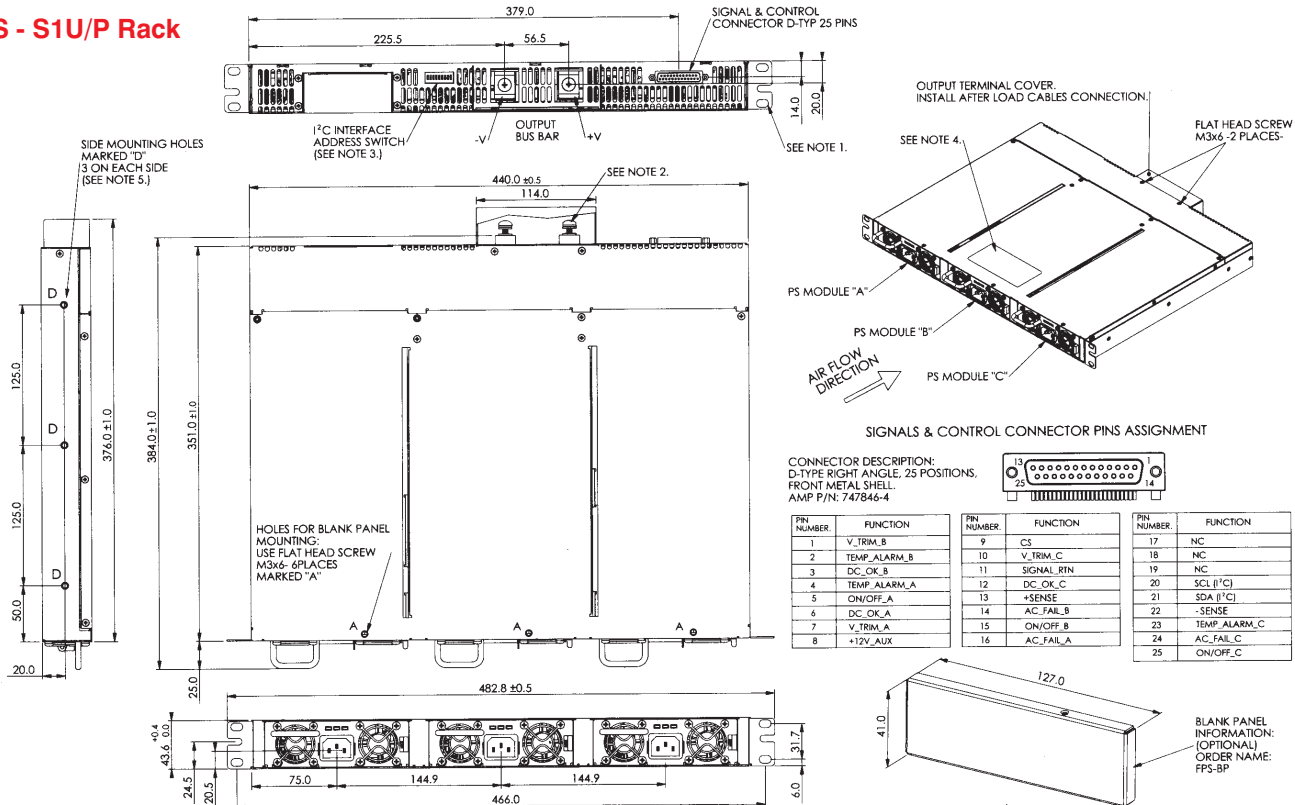


FPS-1000 with rear / rack AC input- Top
FPS-1000P with front panel AC input ,IEC sockets- Bottom

Model Power Supply	V	Output A	(V Range)	Power W
FPS1000 - 24 - P	24.0V	40A	22 - 29V	1000W
FPS1000 - 32 - P	32.0V	30A	28 - 38V	1000W
FPS1000 - 48 - P	48.0V	20A	43 - 58V	1000W
FPS1000 - 24	24.0V	40A	22 - 29V	1000W
FPS1000 - 32	32.0V	30A	28 - 38V	1000W
FPS1000 - 48	48.0V	20A	43 - 58V	1000W

- Models with 'P': AC input via front panel IEC socket on module
- Models without 'P': AC input on rear of rack.

FPS - S1U/P Rack

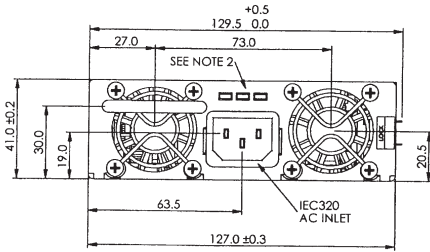


- NOTES**
1. MOUNTING HOLES FOR 19" RACK. USE M6x12 TO FIX THE UNIT TO A RACK.
 2. M6x16 SCREWS FOR LOAD WIRES FIXING. USE M6 LUG FOR THE LOAD WIRES. RECOMMENDED TIGHTENING TORQUE 42-56 Kgf.cm
 3. REFER TO INSTRUCTION MANUAL FOR SETTING DETAILS.
 4. MODEL NAME, VOLTAGE AND CURRENT RATING AND SAFETY APPROVALS SYMBOLS WILL BE SHOWN HERE ACCORDING TO THE SPECIFICATIONS.
 5. MOUNTING HOLES M5 FOR MOUNTING BRACKETS. USE M5x8 SCREWS TO FIX THE BRACKETS TO THE CHASSIS. SCREWS MUST NOT PENETRATE THE CHASSIS MORE THAN 6 mm.
 6. THE FPS-S1U/P RACK IS SHOWN WITH 3 FPS1000/P UNITS INSTALLED.

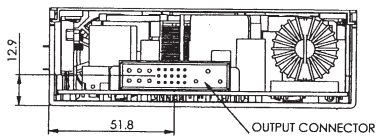
AC/DC Single Output: 1000 - 3000 Watts

FPS1000-P (Front Panel IEC connector)

FRONT VIEW

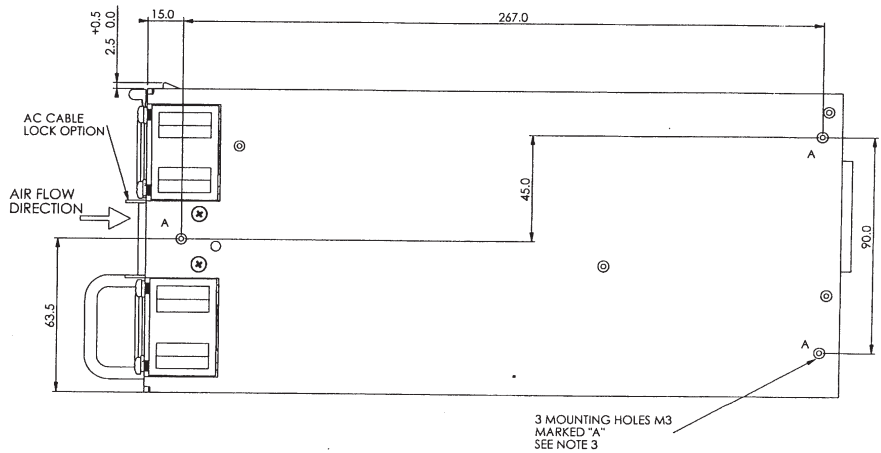
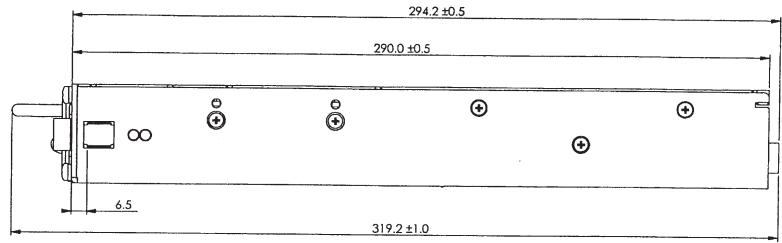
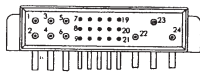


REAR VIEW



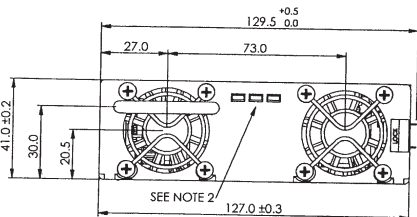
NOTES \triangle

1. CONNECTOR TYPE: PCIB24W9M400A1, POSITRONIC. FEMALE CONNECTOR TYPE: PCIB24W9F400A1.
2. LED INDICATORS, REFER TO INSTRUCTION MANUAL.
3. MOUNTING SCREWS MUST NOT PENETRATE MORE THAN 3mm INTO THE UNIT.
4. MODEL NAME, INPUT AND OUTPUT RATING AND SAFETY APPROVALS SYMBOLS ARE DESCRIBED ON TOP SURFACE LABEL.
5. ALLOW MINIMUM 50 mm OF UNRESTRICTED AIR SPACE AT THE REAR OF UNIT. DO NOT OBSTRUCT AIR FLOW TO THE UNIT FRONT PANEL.
6. IN OUT CONNECTOR BACK VIEW AND PINS ASSIGNMENT:

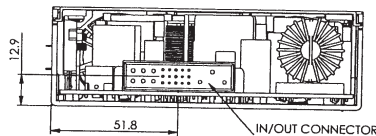


FPS1000 (Rear Panel Positronic connector)

FRONT VIEW



REAR VIEW



NOTES \triangle

1. CONNECTOR TYPE: PCIB24W9M400A1, POSITRONIC. FEMALE CONNECTOR TYPE: PCIB24W9F400A1.
2. LED INDICATORS, REFER TO INSTRUCTION MANUAL.
3. MOUNTING SCREWS MUST NOT PENETRATE MORE THAN 3mm INTO THE UNIT.
4. MODEL NAME, INPUT AND OUTPUT RATING AND SAFETY APPROVALS SYMBOLS ARE DESCRIBED ON TOP SURFACE LABEL.
5. ALLOW MINIMUM 50 mm OF UNRESTRICTED AIR SPACE AT THE REAR OF UNIT. DO NOT OBSTRUCT AIR FLOW TO THE UNIT FRONT PANEL.
6. IN OUT CONNECTOR BACK VIEW AND PINS ASSIGNMENT:

